0–99 Patterns

I

You need: 0–99 patterns

1. Choose a 0–99 pattern, figure out the rule, and write it.

2. Check your answer. If you disagree, talk with the person who made the rule.

3. Do this for at least 5 patterns.

P.S. If you'd like, make other puzzles, put them in your folder, and I'll add them to the class supply.

0–99 Chart

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99

Conservation of Number

Materials

- **18 tiles(could also be cubes or poker chips)**
  10 blue,8 red

1. Establish Equivalence

One to one correspondence OOOOOOOO (Y) (N)

2. Group vs. Row (more red, more blue, same num.)

Reason:

3. Short row vs. Long Row (more red, more blue, same num.)

Reason:

RESPONSE SHEET
for
Conservation of Number (N_1)

Interviewer: _____ Date: _____.

Subject I.D.: _____ Age: _____ yrs. _____ mons.

PART A — Establishing Equivalence

S made the 1-to-1 correspondence: Yes ____ No ____ (Terminate)

PART B — Group versus Row

S's Response: More in Row ____ More in Group ____
Same ____

Reason:

PART C — Short Row versus Long Row

S's Response: More in Long Row ____ More in Short Row ____
Same ____

Reason:

Response Category: _____

Individual Assessment **Student Name** _____

Beginning Number Concepts: Focus on Counting

Assessment Task: The child is presented with a pile of 25-30 counters and is asked first to estimate and then to find out how many. After the child has counted two different piles successfully, he or she is asked to tell how many there are when one counter at a time is added and then when one counter at a time is taken away.

Concepts: Estimating/Rote Counting/ Counting Objects/One More, One Less

Assessment Procedures: ***Present the child with a pile of 25-30 counters.***	**Date of Observations** _____	**Date of Observations** _____
Ask, "How many do you *think* there are?" Could you find out? If the child is unsuccessful working with numbers this large, take enough counters away to make a smaller group If the child is successful, take away enough to end up with 18 or so and ask, "Now how many?" After the child has successfully counted a group, add 3 or 4 one counters one at a time, each time asking, "How many now?" Then take away several counters, one counter at a time, each time asking, "How many now?" (Pay special attention when you take away from the numbers between 20 and 11).	When estimating: _____Is unwilling to estimate. _____Makes unreasonable estimates (Note if too high or too low). _____Makes reasonable estimates. _____Adjusts estimates when gets more information. When counting a group of objects: _____Counts faster or slower than points, (no one to one correspondence). _____Counts one to one, but loses track. _____Is inconsistent but doesn't notice. _____Has a way of keeping track. _____Counting is generally accurate but it takes effort, (Hesitates or recounts). _____Counts accurately with ease. When one is added: _____Guesses. _____Counts to find out how many. _____Knows how many without counting. When one is removed _____Guesses. _____Counts to find out how many. _____Knows how many without counting.	When estimating: _____Is unwilling to estimate. _____Makes unreasonable estimates (Note if too high or too low). _____Makes reasonable estimates. _____Adjusts estimates when gets more information. When counting a group of objects: _____Counts faster or slower than points, (no one to one correspondence). _____Counts one to one, but loses track. _____Is inconsistent but doesn't notice. _____Has a way of keeping track. _____Counting is generally accurate but it takes effort, (Hesitates or recounts). _____Counts accurately with ease. When one is added: _____Guesses. _____Counts to find out how many. _____Knows how many without counting. When one is removed _____Guesses. _____Counts to find out how many. _____Knows how many without counting.

Handout 3

Counting, Comparing and Place Value

Individual Assessment

Student's Name _____

Place Value Concepts: Focus on Numbers as Tens and Ones

Assessment Task: The child is presented with 35-40 counters and asked to first estimate and then find out how many tens and ones there are. After the child has determined how many tens and ones there are, they are asked a series to questions to determine their understanding of conservation, counting by groups, and adding or subtracting ten.

Concepts: Estimation/ Grouping into Tens and Ones/ Using Tens and Ones to Determine the Quantity/ Conservation/ Number Relationships

Assessment Procedures	Date of Observations	Date of Observations
Present the child with 35-40 counters and ask, how many counters do you think there are? How many groups of ten do you think you can make? Would you check and see how many tens you can make? after the child has make all the tens possible, ask, "How many groups of ten did you make? How many left overs?" "Does this give you an idea about how many there might be?" "Are you sure or would you like to check and see?" Ask, "How many will there be if we push them back together?" "How many will there be if we count them by 5's?" By 2's?" Would you check and see? "What if we add ten more? Take ten away?"	**Number sense when estimating:** _____Is not willing to estimate or changes estimate to match answer. _____Estimates, but is not confident or comfortable with being "wrong"." _____Estimate is unreasonable. _____Estimate is reasonable. _____Estimates and then uses the information gained while counting to make a closer estimate. **Describes number as tens and ones:** _____The number of tens and ones predicted is not related to the estimate. _____The number of tens and ones is related to the estimate. **Organizes into tens and ones and determines the quantity:** _____Organizes into tens and ones but counts all. _____Organizes into tens and ones; then counts by tens and then counts the ones. _____Knows by looking at the number of tens and ones and does not need to count. **Conservation of number:** _____Counts to determine the total. _____Estimates a different number, moves one at a time and counts by 5's (or 2's) to determine the amount. _____Estimates a differe... answer and then counts correctly by 5's (or 2's) to determine the amount. _____Knows without counting. **Number relationships** _____Figures out ten more. _____Knows without counting. _____Figures out ten less. _____Knows without counting.	**Number sense when estimating:** _____Is not willing to estimate or changes estimate to match answer. _____Estimates but is not confident or comfortable with being "wrong"." _____Estimate is unreasonable. _____Estimate is reasonable. _____Estimates and then uses the information gained while counting to make a closer estimate. **Describes number as tens and ones:** _____The number of tens and ones predicted is not related to the estimate. _____The number of tens and ones is related to the estimate. **Organizes into tens and ones and determines the quantity:** _____Organizes into tens and ones but counts all. _____Organizes into tens and ones; then counts by tens and then counts the ones. _____Knows by looking at the number of tens and ones and does not need to count. **Conservation of number:** _____Counts to determine the total. _____Estimates a different number, moves one at a time and counts by 5's (or 2's) to determine the amount. _____Estimates a different number and then counts correctly by 5's (or 2's) to determine the amount. _____Knows without counting. **Number relationships** _____Figures out ten more. _____Knows without counting. _____Figures out ten less. _____Knows without counting. counting.

Hundreds Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Missing Numbers from the Hundred Chart

Name_____ Date _____

1.

26		

2.

	35	

3.

	16					

4.

42		

5.

	67	

6.

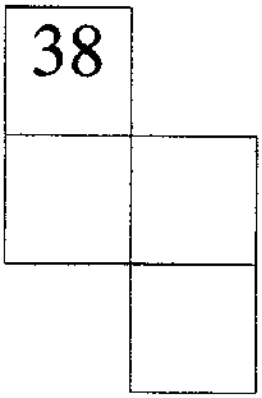
80

7.

51		

8.

9.



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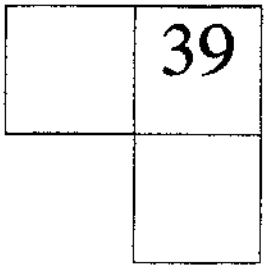

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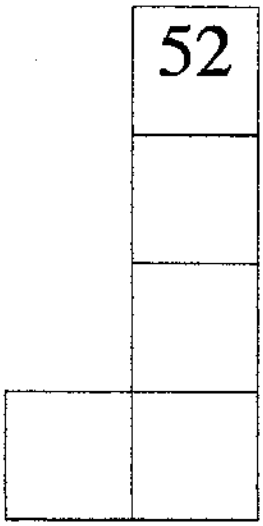

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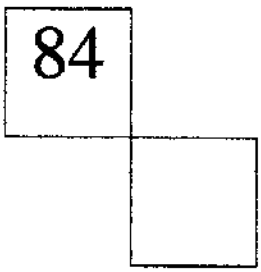

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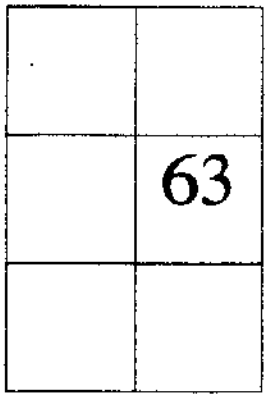

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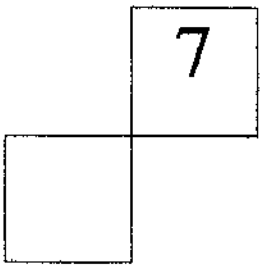

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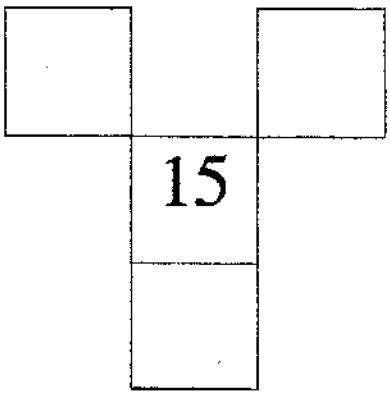

Conservation of Number

Materials

- **18 tiles(could also be cubes or poker chips)**
  10 blue,8 red

1. Establish Equivalence
One to one correspondenc : OOOOOOOO (Y) (N)

2. Group vs. Row (more red, more blue, same num.)
Reason:

3. Short row vs. Long Row (more red, more blue, same num.)
Reason:

Questions for Discussion

How would this information guide your instruction?

How is this information different from a standard written assessment?

Is this task similar to any task found in reading?

RESPONSE SHEET
for
Conservation of Number (N_1)

Interviewer: _____ Date: _____.

Subject I.D.: _____ Age: _____ yrs. _____ mons.

PART A — Establishing Equivalence

S made the 1-to-1 correspondence: Yes ____ No ____ (Terminate)

PART B — Group versus Row

S's Response: More in Row ____ More in Group ____
Same ____

Reason:

PART C — Short Row versus Long Row

S's Response: More in Long Row ____ More in Short Row ____
Same ____

Reason:

Response Category: _____

Overhead 2

Counting, Comparing and Place Value

Individual Assessment **Student Name** _____

Beginning Number Concepts: Focus on Counting

Assessment Task: The child is presented with a pile of 25-30 counters and is asked first to estimate and then to find out how many. After the child has counted two different piles successfully, he or she is asked to tell how many there are when one counter at a time is added and then when one counter at a time is taken away.

Concepts: Estimating/Rote Counting/ Counting Objects/One More, One Less

Assessment Procedures:	**Date of Observations** _____	**Date of Observations** _____
Present the child with a pile of 25-30 counters. Ask, "How many do you *think* there are?" Could you find out? If the child is unsuccessful working with numbers this large, take enough counters away to make a smaller group If the child is successful, take away enough to end up with 18 or so and ask, "Now how many?" After the child has successfully counted a group, add 3 or 4 one counters one at a time, each time asking, "How many now?" Then take away several counters, one counter at a time, each time asking, "How many now?" (Pay special attention when you take away from the numbers between 20 and 11).	When estimating: _____Is unwilling to estimate. _____Makes unreasonable estimates (Note if too high or too low). _____Makes reasonable estimates. _____Adjusts estimates when gets more information. When counting a group of objects: _____Counts faster or slower than points, (no one to one correspondence). _____Counts one to one, but loses track. _____Is inconsistent but doesn't notice. _____Has a way of keeping track. _____Counting is generally accurate but it takes effort, (Hesitates or recounts). _____Counts accurately with ease. When one is added: _____Guesses. _____Counts to find out how many. _____Knows how many without counting. When one is removed _____Guesses. _____Counts to find out how many. _____Knows how many without counting.	When estimating: _____Is unwilling to estimate. _____Makes unreasonable estimates (Note if too high or too low). _____Makes reasonable estimates. _____Adjusts estimates when gets more information. When counting a group of objects: _____Counts faster or slower than points, (no one to one correspondence). _____Counts one to one, but loses track. _____Is inconsistent but doesn't notice. _____Has a way of keeping track. _____Counting is generally accurate but it takes effort, (Hesitates or recounts). _____Counts accurately with ease. When one is added: _____Guesses. _____Counts to find out how many. _____Knows how many without counting. When one is removed _____Guesses. _____Counts to find out how many. _____Knows how many without counting.

DRAFT

Individual Assessment

Student's Name _____

Place Value Concepts: Focus on Numbers as Tens and Ones

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Concepts: Estimation/ Grouping into Tens and Ones/ Using Tens and Ones to Determine the Quantity/ Conservation/ Number Relationships

Assessment Procedures	Date of Observations	Date of Observations
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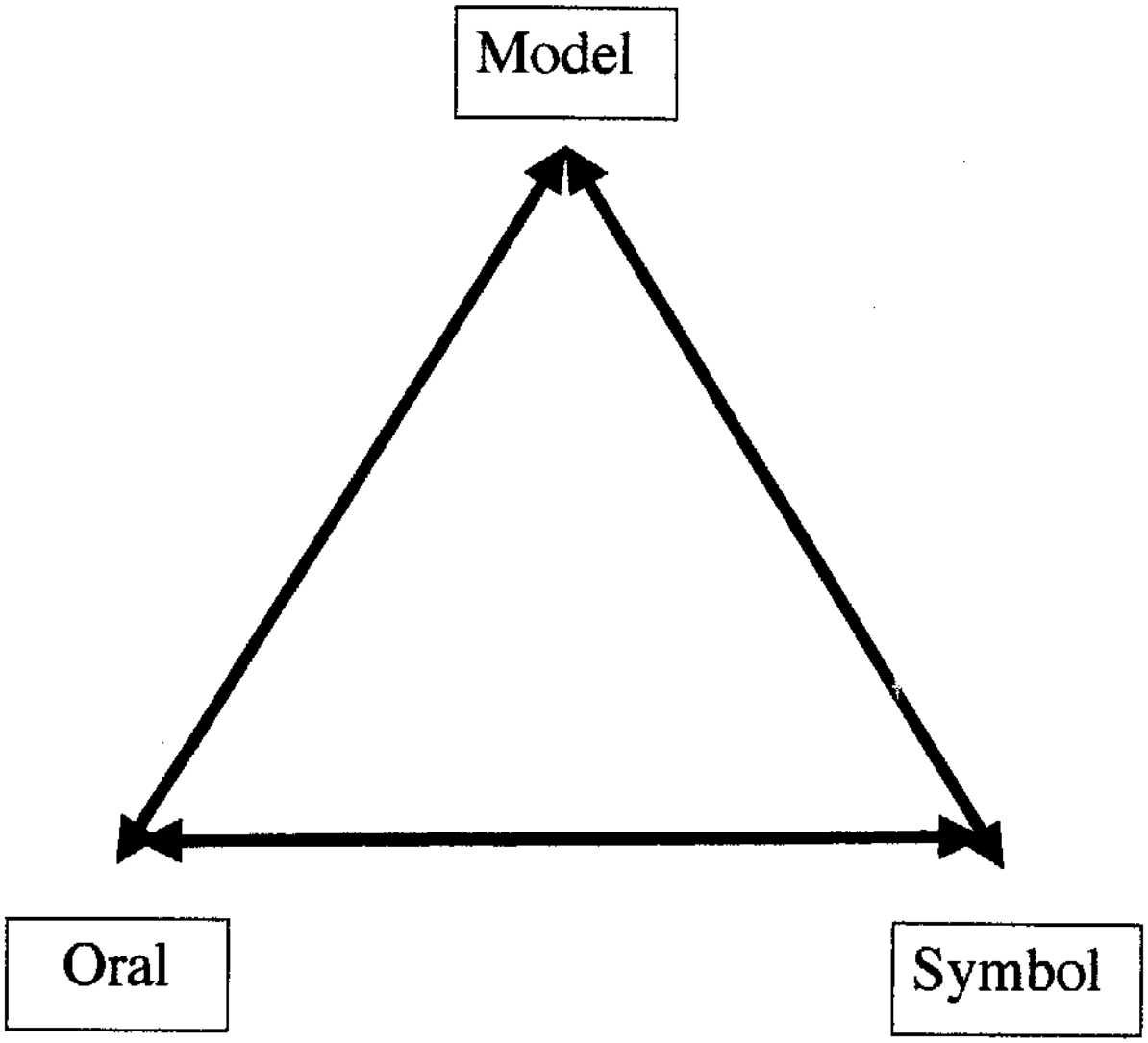
Model-Oral-Symbol Translations



Hundreds Chart

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61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100